

Serial No.: 08/981,998

Confirmation No.: 8733

Filed: May 11, 1998

For: NUCLEIC ACID ENCODING SPINOCEREBELLAR ATAXIA-2 AND PRODUCTS RELATED THERETO

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**Remarks**

Claims 5 and 82 having been amended, and claims 74 and 76-81 having been canceled without prejudice, the pending claims are claims 1-3, 5, 7, 59, 61, 71-73, 75, 82-84. Reconsideration and withdrawal of the rejections are respectfully requested. No additional search or examination is necessitated by the amendments, nor is any substantial amount of additional work required on the part of the Patent Office or the Examiner.

Claim 5 has been amended to clarify the scope of the claim, and to correct the antecedent basis of a term. It is Applicant's position that these amendments do not narrow the scope of the claim.

Claim 82 has been amended to correct the antecedent basis of a term. It is Applicant's position that this amendment does not narrow the scope of the claim.

Claims 74 and 76-81 have been canceled without prejudice. Applicant reserves the right to prosecute these claims in a continuing application, and arguments against the pending rejections of claims 74 and 78-79 will be made in such an application if the rejections are maintained.

**The 35 U.S.C. §112, Second Paragraph, Rejection**

The Examiner rejected claims 74, 78-79 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. This rejection is respectfully traversed. Claims 74 and 78-79 have been canceled, thereby rendering this rejection moot.

**Double Patenting Rejection**

Claim 74 was rejected under the 37 C.F.R. §1.75 as being a substantial duplicate of claim 75. The rejection is respectfully traversed. Claim 74 has been canceled, thereby rendering this rejection moot.

**Amendment and Response Under 37 C.F.R. §1.116 - Expedited Examining Procedure**

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**Summary**

It is respectfully submitted that the pending claims 1-3, 5, 7, 59, 61, 71-73, 75, 82-84 are in condition for allowance and notification to that effect is respectfully requested. The Examiner is invited to contact Applicant's Representatives, at the below-listed telephone number, if it is believed that prosecution of this application may be assisted thereby.

Respectfully submitted for  
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Date

September 3, 2002

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**CERTIFICATE UNDER 37 CFR §1.10:**

"Express Mail" mailing label number: EL196573535US Date of Deposit: 3 September 2002

The undersigned hereby certifies that this paper is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR §1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, BOX AF, Washington, D.C. 20231.

By: Jacquelyn K. Torborg  
Name: JACQUELYN K. TORBORG

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**APPENDIX A - SPECIFICATION/CLAIM AMENDMENTS  
INCLUDING NOTATIONS TO INDICATE CHANGES MADE**

Serial No.: 08/981,998  
Docket No.: 256.00010120

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Amendments to the following are indicated by underlining what has been added and bracketing what has been deleted.

**In the Claims**

For convenience, all pending claims are shown below.

1. Isolated nucleic acid obtained from locus q24.1 of chromosome 12 of a human with symptoms of spinocerebellar ataxia, wherein the nucleic acid comprises an open reading frame encoding a polypeptide of greater than 140.1 kDa and a CAG repeat region comprising at least 35 repeats encoding a polyglutamine tract, or a recombinantly produced nucleic acid having the nucleotide sequence of the isolated nucleic acid.
2. Isolated nucleic acid according to claim 1, wherein said nucleic acid comprises DNA.
3. DNA according to claim 2, wherein said DNA is cDNA.
5. (Three Times Amended) Isolated nucleic acid, wherein a complement of said nucleic acid hybridizes to [nucleotides 1 - 516 of SEQ ID NO:1 or] nucleotides 163-4098 of SEQ ID NO:2 in a solution containing 50% formamide, 5X Denhardt's solution, 5% SSPE, 0.2% SDS at 42°C, followed by washing in 0.2X SSPE, 0.2% SDS at 65°C, wherein the isolated nucleic acid [DNA] encodes a polypeptide of SEQ ID NO:3.
7. A vector comprising DNA according to claim 2.
59. An isolated nucleic acid encoding the amino acid sequence set forth at SEQ ID NO:5.

**Amendment and Response Under 37 C.F.R. §1.116 - Appendix A**

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61. An isolated nucleic acid set forth at SEQ ID NO:4 encoding an SCA2 polypeptide.
71. An isolated nucleic acid comprising nucleotides 163-4098 of SEQ ID NO:2.
72. An isolated nucleic acid encoding the amino acid sequence set forth at SEQ ID NO:3.
73. An isolated nucleic acid comprising nucleotides 50-3454 of SEQ ID NO:4.
74. Canceled.
75. An isolated nucleic acid comprising the nucleic acid sequence set forth at SEQ ID NO:19.
76. Canceled.
77. Canceled.
78. Canceled.
79. Canceled.
80. Canceled.
81. Canceled.

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82. (Amended) Isolated nucleic acid, wherein a complement of said nucleic acid hybridizes to nucleotides 50-3454 of SEQ ID NO:4 in a solution containing 50% formamide, 5X Denhardt's solution, 5% SSPE, 0.2% SDS at 42°C, followed by washing in 0.2X SSPE, 0.2% SDS at 65°C, wherein the isolated nucleic acid [DNA] encodes a polypeptide of SEQ ID NO:5.

83. A vector comprising DNA according to claim 5.

84. A vector comprising DNA according to claim 82.